REMARKS

Claims 1-20 and 29-35 are pending in the application, claim 20-28 having been canceled above and claims 29-35 having been newly added above. Claims 10-19 stand allowed, and claims 1-4, 6, and 9 stand rejected. Claims 5, 7, and 8 stand objected to.

Claims1 and 2 have been amended to recite additional aspects of Applicants' invention. Claims 5 and 7 have been rewritten in independent form as suggested by the Examiner. In addition, claims 7 and 8 have been amended above to provide a clearer antecedent basis for the term "chips". Claims 29-35 have been added to recite additional aspects of Applicants' invention.

INFORMATION DISCLOSURE STATEMENTS

Two information disclosure statements have been filed, one on November 13, 2003 (electronically filed) and one February 20, 2004, which Applicants respectfully request be considered.

CLAIM OBJECTIONS

Claims 7 and 8 stand objected to because "claims 7 and 8 recite the limitation 'said chips' which lacks proper antecedent basis because no claim on which claims 7 and 8 depend recites these chips."

Applicants have amended claims 7 and 8 to replace the term "chips" with "arrays" to provide a clearer antecedent basis for said terms. Accordingly, Applicants understand the objections to claims 7 and 8 to be overcome and respectfully request the withdrawal of such objections.

REJECTIONS UNDER 35 U.S.C. 102

Claims 1-3 stand rejected under 35 U.S.C. 102(b) as being anticipated by EP 476241 (Roeckle). The Office Action states that "[r]egarding claim 1, Roeckle discloses in figs. 1-7 an optical switch comprising: first and second optical arrays (#13, #14) separated by an interface; and a support structure upon which said optical arrays are mounted (fig. 1), the support structure including an area (#8) which has a flexing profile that differs from the remainder of said support structure, wherein the operation of force on said support structure serves to optically couple and de-couple said optical arrays (fig. 3)".

Applicants have amended claim 1 to recite the features of "first and second optical arrays separated by an interface, said first array comprising a first optical fiber comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material and said second array comprising a second optical fiber comprising an endface angled at an angle greater than a total internal reflection angle of the second optical fiber material, said second fiber endface facing said first fiber endface to provide a gap between the endfaces of the fibers". (Emphasis Added.) Applicants respectfully submit that the figures of Roeckle fail to disclose at least the claimed features of first and second optical fibers "comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material". In addition, as Applicants best understand the English translation (which is in non-standard English, perhaps a machine translation), Roeckle fails to disclose anywhere in the text first and second optical fibers "comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material". Indeed, Roeckle **teaches away** from a FTIR/TIR switch comprising first and second optical fibers "comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material".

For example, Roeckle discloses at page 8 of the translation that the "housing 16 preferably consists of electrically isolating and anti-vibration material, whereby it is filled with a liquid... The liquid must... resemble or have a similar refractive index as the glass of the fiber core." Such a liquid having a similar refractive index as the glass of the fiber core, if place in a FTIR/TIR, switch would render the FTIR/TIR switch inoperable, since light would no longer be totally internally reflected by the angled fiber endfaces. Thus, for these reasons Applicants respectfully submit that claim 1, as well as claims 2 and 3 which depend therefrom, are patentable over the disclosure of Roeckle. Accordingly, Applicants respectfully request that the rejection of claims 1-3 be withdrawn.

Claims 1, 4, and 6 stand rejected under 35 U.S.C. 102(b) as being anticipated by DE 3927441 (Eicher). The Office Action states that "[r]egarding claim 1, Eicher discloses in fig. 1 an optical switch comprising: first and second optical arrays (#8) separated by an interface; and a support structure upon which said optical arrays are mounted (#12,#15,#16), the support structure including an area (#17) which has a flexing profile that differs from the remainder of

said support structure, wherein the operation of force on said support structure serves to optically couple and de-couple said optical arrays".

As stated above, Applicants have amended claim 1 to recite the features of "first and second optical arrays separated by an interface, said first array comprising a first optical fiber comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material and said second array comprising a second optical fiber comprising an endface angled at an angle greater than a total internal reflection angle of the second optical fiber material, said second fiber endface facing said first fiber endface to provide a gap between the endfaces of the fibers". (Emphasis Added.) Applicants respectfully submit that the figures of Eicher fail to disclose at least the claimed features of first and second optical fibers "comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material". In addition, as Applicants best understand the non-standard English translation, Eicher fails to disclose anywhere in the text first and second optical fibers "comprising an endface angled at an angle greater than a total internal reflection angle of the optical fiber material". Thus, for these reasons Applicants respectfully submit that claim 1, as well as claims 4 and 6 which depend therefrom, are patentable over the disclosure of Eicher. Accordingly, Applicants respectfully request that the rejection of claims 1, 4, and 6 be withdrawn.

REJECTIONS UNDER 35 U.S.C. 103

Dependent claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Eicher. Claim 9 depends from claim 1. Thus, claim 9 is patentable for at least the reasons provided above regarding claim 1. Therefore, Applicants respectfully request that the rejection of claim 9 be withdrawn.

In addition, the Office Action states that "it is well known to use etching to form the grooves, and further, to use an etch stop layer to ensure the surface is etched to the correct depth."Applicants respectfully request a reference in support of the Examiner's position if the rejection of claim 9 is maintained.

ALLOWABLE SUBJECT MATTER

Applicants note with appreciation the indication that claims 5, 7, and 8 would be allowable if rewritten in independent form to incorporate the subject matter of the base claim and any intervening claims. Applicants have rewritten claims 5 and 7 in independent form to incorporate the subject matter of the respective base claim and any intervening claims. Thus, it is understood that claims 5 and 7 are now allowable. Since claim 8 depends from claim 7, it is also understood that claim 8 is now allowable.

In view of the foregoing amendments and remarks, it is believed that the claims in this application are now in condition for allowance. Early and favorable reconsideration is respectfully requested. The Examiner is invited to telephone the undersigned in the event that a telephone interview will advance prosecution of this application.

Respectfully submitted,

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